

The Environmental Protection Agency announced that effective May 6th, 2006, federal regulators no longer require an oxygenate additive (which helps gasoline to burn more cleanly and efficiently) in smog-afflicted areas required to use reformulated gasoline (which includes Delaware). As a result, the additive methyl tertiary butyl ether (MTBE) is no longer required to be added to gasoline. But even before the EPA's announcement, refiners and distributors of gasoline sold in the Northeast Region had decided to drop the controversial additive, which has proven to contaminate soil and drinking water after leaking from underground storage tanks. Instead of dropping an additive altogether, refiners decided to substitute Ethanol in place of MTBE, in a 90% Gasoline/10% Ethanol blend (E10), for various reasons. Therefore, during the course of Spring/Summer 2006, E10 will be produced and distributed to the Delaware motoring public.

The Delaware Motor Fuel Tax Administration is working diligently, in conjunction with the Department of Natural Resources and Environmental Control, to educate retail gasoline station operators and the motoring public about the fuel composition change. Motor Fuel Tax is providing gas pump labels to all Retail Dealers, to insure that these stations are able to meet the labeling requirement of Gasoline Regulation B (3), cited later in this brochure. After the initial distribution, Motor Fuel Tax will provide additional labels at a cost of \$1.00 per label.

To aid in the understanding of the responsibilities of the Motor Fuel Tax Administration, as those responsibilities relate to the enforcement of Ethanol composition in gasoline, the following information has been compiled:

- 6 Del. C., ch. 29, §2903 requires that products sold by manufacturers of motor fuel, diesel fuel, heating oil..."shall be in conformity with state standards".
- Retail Sales Regulation 2903.2 (C) states that "Any motor fuel sold at retail...which does not

meet or exceed ASTM specifications for that type of fuel...may be ordered corrected or removed from the marketplace".

- 30 Del. C., ch. 51, §5101 (5) states that "a product will be considered "Gasohol" when it is composed of 1 part anhydrous ethyl alcohol (ethanol) and 9 parts unleaded gasoline".
- Gasoline Regulation B states the following:
  1. "Retailer" shall include a service station, operator, broker, jobber, peddler or any person who offers gasoline for sale in Delaware and who does not possess a valid Delaware Distributor's license.
  2. "Gasoline" as defined in section 5101(4), shall include the mixture of gasoline and ethyl alcohol (ethanol) commonly referred to as "gasohol".
  3. "Gasohol" shall be a blend of nine (9) parts unleaded gasoline and one (1) part ethanol and shall be mixed by a distributor at time of delivery to a purchaser. A retail seller shall clearly label all pumps dispensing gasohol as such.
- Gasoline Regulation I states the following:
  1. When analyzed by a laboratory, if the ethanol content of a sample of gasohol is significantly more or less than 10%, a "Stop Sale" will be issued to the seller until the situation is corrected.
  2. Assuming a "Stop Sale" is issued for a specification failure of gasohol, adding straight ethanol to the storage tank to raise the ethanol content will not be permitted. The product must be pumped out and rebled at the proper temperature for homogenizing before replacing into storage.
  3. For purposes of the administration of this chapter, the State of Delaware does hereby adopt the specifications of motor fuels as defined by the "American Society of Testing and Materials" (ASTM).

## Frequently Asked Questions about E10

**Why the switch to E10?** The federal Energy Policy Act of 2005 requires the doubling of ethanol use over the next 6 years as a renewable fuel that lowers our dependence on foreign oil.

**Will my car, lawn mower, boat engine, etc. run on E10?** Most vehicles and small engines should run fine on E10. Check the owner's manual or the manufacturer to verify compatibility with E10.

**Will using E10 affect the mileage of my car?** Testing has shown fuel mileage may decrease by approximately 2%. A vehicle that averages 30 mpg on the highway would average about 29.4 mpg using an ethanol-blended fuel.

**What problems may be encountered with E10?** Ethanol readily mixes with water. If the tank storing the E10 has water in it, the Ethanol will separate from the gasoline. This can result in damage to an engine.

**What should I do if my engine experiences problems after fueling?** If you suspect the problem is a result of poor quality gasoline contact the Delaware Motor Fuel Tax Administration (MFTA) office at (302)744-2715 and notify the gas station owner. MFTA will visit the gas station and will take samples of the fuel to determine if the fuel meets quality standards. If the fuel is not of proper quality MFTA will stop sales of gasoline at the station until the situation is resolved. Be sure to save your gasoline sale receipt for proof of the time, date, location, fuel type and pump from which you purchased the fuel.

**I have a flexible fuel vehicle. Where can I purchase E85?** At the present time no gas station in Delaware sells E85. This may change in the near future. Some private fleets maintain their own E-85 storage tanks.

**Ten Things Delaware Tank Owners and Operators Need to Know About E-10 Gasoline  
(Information provided by the Delaware Department of Natural Resources and Environmental Control, Tank Management Branch)**

1. "Ethanol" is a type of alcohol, typically made from corn.
2. "E10" is a blend of 10% ethanol and 90% unleaded gasoline. Anything with more than a 10% concentration of ethanol cannot legally be sold as Gasoline in Delaware.
3. Ethanol readily mixes with water. If tank owners/operators are not diligent about checking for water in the tanks and removing it, the ethanol in the E10 blend will "find" the water, separate itself from the gasoline, sink to the bottom of the tank, and cause problems for customers' cars. Any water intrusion problems must be fixed. No amount of water in the tank is acceptable.
4. It is best to clean the tank before taking the first delivery of "E10". Any sludge or particulates in the bottom of the tank will be suspended in the ethanol and can cause problems with filters and fuel lines.
5. Since ethanol is a good cleaning agent, it will loosen scale buildup and sediment from the tanks, piping, and dispensers when they first start being used. As a result, tank owners/operators may have to change the filters in the dispensers more frequently, at least at first. Filters must have pores of 10 microns or less on dispensers selling E10.
6. Tank owners/operators must use the correct paste to check E10 tanks for water. This is different than the paste used for the current gasoline/MTBE mix.
7. Pump operators are required by the Delaware Department of Transportation, Motor Fuel Tax Administration, to label the dispensers so that consumers know the gasoline is blended with ethanol.
8. UST system equipment composed of certain metals, polymers and elastomers may not be compatible with ethanol. Tank owners/operators must verify that the UST system components (including leak detection equipment, sump sensors, and pumps) are E10 compatible, and ensure that Automatic Tank Gauge systems are properly calibrated for use with E10.
9. Most vehicles and small engines should run fine on E10, as long as water does not enter the tank. Customers should check their owner's manual to verify compatibility.
10. Ethanol blends should not be mixed with gasoline containing MTBE.

**Important Contact Information**

**Delaware Office of Retail Gasoline Sales**

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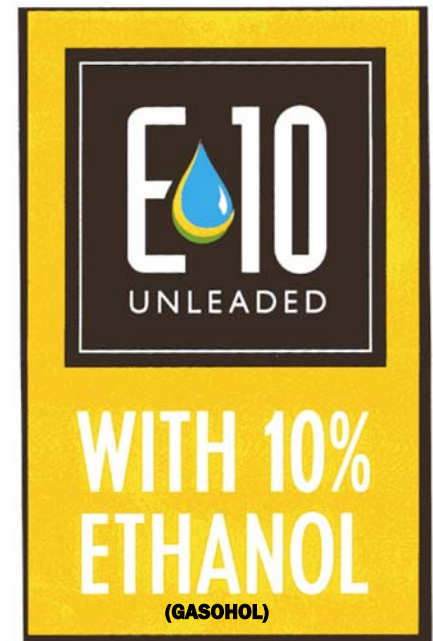
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**Ethanol in Delaware Gasoline**